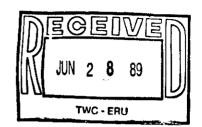


90-890000458

Bonded Carpet Cushion • Prime Carpet Cushion Sponge Carpet Cushion • Hair - Hair & Jute Cushion Bonded Synthetic Fiber Cushion



June 22, 1989

T0:

Bob Jernigan

FROM:

Larry R. Heppe

President, M P I, Inc.

Division of Leggett & Platt, Inc.

I am requesting that you act as MPI's technical contact for the purpose of completing the CAIR forms for 1988.

Larry R. Heppe

LRH:ss

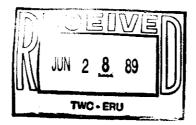
SERVING THE CARPET DISTRIBUTING AND FURNITURE INDUSTRIES



DOW CHEMICAL U.S.A.

May 3, 1989

MIDLAND, MICHIGAN 48674



M P I INC

3293677

1301 COLD SPRINGS RD FORT WORTH TX 76102

Sir/Madam:

Enclosed are Material Safety Data Sheet(s) which provide information on products which you have purchased from us in the recent past. Since you may redirect the products to more than one place within your location, please make sure this information is available to all persons handling and/or using the product.

These Material Safety Data Sheet(s) have either been revised since you last received them or are for products which you recently purchased. Please consider them as the current copy to replace any previous version you may have received.

The distribution of these sheets is part of a continuing program of providing information and updating our customers. The regulations promulgated by OSHA for Hazard Communication, 29 CFR 1910.1200 have been considered in preparing these Material Safety Data Sheet(s).

Thank you for your help.

J.E. Betso

Health and Environmental Sciences

1803 Building

klr

Enclosure(s)



MATERIAL SAFETY DATA SHEET

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 92098

Page: 1

PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

Effective Date: 12/13/88 Date Printed: 05/03/89

MSDS:000609

INGREDIENTS: (% w/w, unless otherwise noted)

Toluene-2,4-diisocyanate (TDI)

CAS# 000584-84-9

80%

Toluene-2,6-diisocyanate

CAS# 000091-08-7

20%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

Y

BOILING POINT: 250C (482F) VAP PRESS: 0.01 mmHg @ 20C

VAP DENSITY: 6.0

SOL. IN WATER: Insoluble SP. GRAVITY: 1.22 @ 25/15.50

APPEARANCE: Water white to pale yellow liquid.

ODOR: Sharp pungent odor.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 127C (260F)
METHOD USED: PMCC, ASTM D-93

FLAMMABLE LIMITS LFL: Not determined UFL: Not determined

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or foam.

If water is used, it should be in very large quantity.

The reaction between water and hot isocyanate may be vigorous.

FIRE & EXPLOSION HAZARDS: Down-wind personnel must be evacuated.

(Continued on Page 2)
(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company



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Form Approved
OMB No. 2010-0019
Approval Expires 12-31-89

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90-890000 45B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Comprehensive Assessment Information Rule REPORTING FORM

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When completed, send this form to:

Document Processing Center Office of Toxic Substances, TS-790 U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 Attention: CAIR Reporting Office

For Agency Use Only:			
Date of Receipt:			
Document Control Number: _			
Docket Number:			

		SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION
PART	A	GENERAL REPORTING INFORMATION
1.01	TI	nis Comprehensive Assessment Information Rule (CAIR) Reporting Form has been
CBI		empleted in response to the <u>Federal Register Notice of $[1]2$ $[2]2$ $[8]8$ mo. day year</u>
[_]	۵.	If a Chemical Abstracts Service Number (CAS No.) is provided in the Federal
		Register, list the CAS No
	b.	If a chemical substance CAS No. is not provided in the Federal Register, list either (i) the chemical name, (ii) the mixture name, or (iii) the trade name of the chemical substance as provided in the Federal Register.
		(i) Chemical name as listed in the rule NA
		(ii) Name of mixture as listed in the rule
		(iii) Trade name as listed in the rule
	c.	If a chemical category is provided in the Federal Register, report the name of the category as listed in the rule, the chemical substance CAS No. you are reporting on which falls under the listed category, and the chemical name of the substance you are reporting on which falls under the listed category. Name of category as listed in the rule
		CAS No. of chemical substance
		Name of chemical substance
		ntify your reporting status under CAIR by circling the appropriate response(s).
I	Men	ufacturer
_1	Impo	orter 2
		essor(3
		manufacturer reporting for customer who is a processor 4
		processor reporting for customer who is a processor
	rb	(X) this hav if you accept a construction of

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1.03 <u>CBI</u> [_]	in Yes	s the substance you are reporting on have an "x/p" designation associated with it the above-listed Federal Register Notice?
1.04 <u>CBI</u> [_]	8.	Do you manufacture, import, or process the listed substance and distribute it under a trade name(s) different than that listed in the Federal Register Notice? Circle the appropriate response. Yes
	b.	Check the appropriate box below: [] You have chosen to notify your customers of their reporting obligations Provide the trade name(s) NA
		[_] You have chosen to report for your customers [_] You have submitted the trade name(s) to BPA one day after the effective date of the rule in the <u>Federal Register</u> Notice under which you are reporting.
1.05 CBI [_]	Trac Is t	ou buy a trade name product and are reporting because you were notified of your ring requirements by your trade name supplier, provide that trade name. Voranate (R) Type II Toluene Diisocyanate he trade name product a mixture? Circle the appropriate response.
1.06 CBI	"I hente	ification The person who is responsible for the completion of this form must the certification statement below: ereby certify that, to the best of my knowledge and belief, all information red on this form is complete and accurate.* erry R. Heppe NAME SIGNATURE 6/26/89 DATE SIGNED esident (817) 335-7676 TELEPHONE NO.
<u>_</u>]	ark	(X) this box if you attach a continuation sheet.

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1.07 CBI	Exemptions From Reporting If you have provided BPA or another Federal agency with the required information on a CAIR Reporting Form for the listed substance within the past 3 years, and this information is current, accurate, and complete for the time period specified in the rule, then sign the certification below. You are required to complete section 1 of this CAIR form and provide any information now required but not previously submitted. Provide a copy of any previous submissions along with your Section 1 submission.				
		e best of my knowledge and belief, a included in this CAIR Reporting Form and is current, accurate, and comp			
	NA				
	NAME	SIGNATURE	DATE SIGNED		
	TITLE	TELEPHONE NO.	DATE OF PREVIOUS SUBMISSION		
CBI	those confidentiality claims when the second it will continue to take the been, reasonably ascertainable using legitimate means (other the judicial or quasi-judicial prinformation is not publicly available.	ve asserted any CBI claims in this tements truthfully and accurately a hich you have asserted. to protect the confidentiality of these measures; the information is not by other persons (other than govern than discovery based on a showing of coceeding) without my company's consillable elsewhere; and disclosure of the my company's comp	the information, ot, and has not ment bodies) by special need in sent; the		
-	NA	•	•		
	NAME	SIGNATURE	DATE SIGNED		
-	TITLE	TELEPHONE NO.			
-l Mar	k (X) this box if you attach a				

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1.09	9 Facility Identification	
<u>CBI</u>	Name [M]_]P]_]]]]]]]]]]]]]]]]]]]]]]]	_1_1
[_]	Address [1]3]0]1]1C]0]1]D]1S]P]R]1]NG[S]1R]D]1]1	-''. -
	Street 「正」□「正」□「」」「」「」「」「」「」「」「」「」「」「」「」「」」「」」「」「」「」「」「	
	City	
	(<u>T]X</u>] (<u>7]6]1]0]2][]] State Zip</u>	
	Dun & Bradstreet Number]_]_
	BPA ID Number	<u>,</u> _, _
	Employer ID Number	1717
	Primary Standard Industrial Classification (SIC) Code	816
	Other SIC Code	
.10	Company Headquarters Identification	
DI 1	Name [L]E]G]G]E]T]T] _ & _ P L A T T T T T T T T T	,,-
<u>_</u> 1 4	Address [N]O].]]]]]]]][]E]G]G]E]]]]]]]]]]]]]]]]]]]]]	''- ₁
		·—·—
	(元)女)女,工,甘, ([[]]] [[]] [[]] [[]] [[]] [[]] [[]] []
	[M]O] [6]4]8]3]6][]] State	
D	Dun & Bradstreet Number	-17-1
B	Employer ID Number	3101

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1.11	Parent Company Identification
<u>CBI</u>	Name (L]E]G]G]E]T]T]_]&]_]P]L]A]T]T]_]_]]]]
(_)	Address [N]O]_]_]_]_]E]G]G]E]T]T]_]R]O]A]D]_]_]_]_]_]_]_]
	(C)A)E)T)H)A)G)E)_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
	(M)0) (6)4)8)3)6](_)_)
	Dun & Bradstreet Number
1.12	Technical Contact
BI	Name (B)0 B]_]J]E)R]N]]]G]A]N_]_]_]_]_]_]_]_]
_1	Title [S]A E E T Y D B B D R
	Address [2]6]4]4]]]M]I]M]0]S]A]]P]K]]]]]]]]]]]]]]]
	(F)OIRITIDINITIHOJUTIHOJUTIDIDIDIDIDIDIDIDIDIDIDIDIDIDIDIDIDIDID
	[<u>〒]</u> [<u> </u> <u> </u>] <u> </u>]]]
	Telephone Number
.13	This reporting year is from $[0]1][8]8$ to $[1]2][8]8$ Ho. Year

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[_] Mark (X) this box if you attach a continuation sheet.

1.14	Facility Acquire provide the foll	ed If you purchased this facility during the reporting year, lowing information about the seller:	
CBI	Name of Seller [<u> </u>	_,
	Mailing Address		-' -,
		(_1
	•	[_]_] [_]_]_]_]][_]_]_]_	_]
	Employer ID Numbe	er[_1_1_1_1_1_1_1_	-,
	Date of Sale	Mo. Day Year	
	Contact Person [· ·1
	Telephone Number	(_))(_)]-(_)]-(_]-(_]-(_]-(_]-(_]-(_]-(_]-(_]-(_]-	., []
1.15	Facility Sold] following informat	If you sold this facility during the reporting year, provide the tion about the buyer:	***
CBI N	iame of Buyer $[\overline{N}]$	[]	
<u> </u>		[_]	i j
		(_)_,_,_,_,_,_,_,_,_,_,_,_,_,_,_,_,_,_,_	}
		City	
		[_]_] [_]_]_]_]-[_]_]_] State	
B	mployer ID Number	[_]_]_]_]_]	
De	ite of Purchase	Mo. Day Year	
Co	ontact Person [_]		
Te	elephone Number	(_)_]-(_)_]-(_)_]-(_)_]-(_)_]-(_)_]-(_)	
] Mari	k (X) this box if	you attach a continuation sheet.	

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1.16 <u>CBI</u>	For each classification listed below, state the quantity of the listed was manufactured, imported, or processed at your facility during the re			
	Classification	luantity (kg/yr		
	Manufactured	NΔ		
	Imported	37.4		
	Processed (include quantity repackaged)	NA		
	Of that quantity manufactured or imported, report that quantity:	_262,864		
	In storage at the beginning of the reporting year	NA		
	For on-site use or processing			
	For direct commercial distribution (including export)			
	In storage at the end of the reporting year	NA.		
	Of that quantity processed, report that quantity:			
	In storage at the beginning of the reporting year	11,133		
	Processed as a reactant (chemical producer)			
	Processed as a formulation component (mixture producer)			
	Processed as an article component (article producer)	IIK		
	Repackaged (including export)	MA		
	In storage at the end of the reporting year	7,070		

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^[] Mark (X) this box if you attach a continuation sheet.

1.17 <u>CBI</u>	Mixture If the listed substance on which you are required to report is a mixture or a component of a mixture, provide the following information for each component chemical. (If the mixture composition is variable, report an average percentage of each component chemical for all formulations.)			
[_]	Component Name	Supplier Name	Average X Composition by Weight (specify precision,e.g., 45% ± 0.5%)	
	NA NA	NA NA	NA	
			Total 100%	

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[] Mark (X) this box if you attach a continuation sheet.

0 0 0 0 0	Year ending Quantity manufactured Quantity imported Quantity processed Fear ending Quantity manufactured Quantity manufactured Quantity imported Quantity processed	NA NA 239,506 [1]2] [8] NA NA
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Quantity manufactured Quantity imported Quantity processed Gear ending Quantity manufactured Quantity imported	NA NA 239,506 [1]2] [8] NA NA
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Quantity imported Quantity processed [ear ending	NA 239,506 [1]2] [8] NA NA
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Quantity imported Quantity processed [ear ending	NA 239,506 [1]2] [8] NA NA
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Quantity processed	239,506 [1]2] [8] Mo. Yes
0 0 0 0 0	Quantity manufactured	Mo. Yea
0 0 0 0 0	Duantity imported	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Duantity imported	
01 01 01 01	nuantity processed	
Q1 Q1 Q1 .05 Sp		336,923
Q: Q: - - - - -	ear ending	[]]2#] [8]: Ho. Yes
Q: Q: -05 S;	uantity manufactured	NA
.05 Sp	uantity imported	
	wantity processed	240,281
	pecify the manner in which you manufactured the listed substance.	Circle all
_] _{Co}	ntinuous process	NA NA
	micontinuous process	
	tch process	
		••••••
	ck (X) this box if you attach a continuation sheet.	

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<u>CBI</u>	specify the manner in appropriate process t	n which you processed types.	the listed substance.	Circle all
	Continuous process .	••••••	••••••	• • • • • • • • • • • • • • • • • • • •

			•••••	
2.07 CBI	State your facility's substance. (If you a question.)	name-plate capacity re a batch manufacture	for manufacturing or per or batch processor.	processing the listed do not answer this
[_]	Manufacturing capacity	у	• • • • • • • • • • • • • • • • • • • •	NA kg/yr
	Processing capacity		-	UK kg/yr
2 00	T5 non-fabrual continu			
	If you intend to incremanufactured, imported year, estimate the incovolume.	l. Of Drocessed at any	/ time efter wave aver	amb aammamaka 61. 3
<u>CBI</u>	year, estimate the inc	l. Of Drocessed at any	/ time efter wave aver	ent corporate fiscal year's production Processing
2.08 CBI	year, estimate the inc	rease or decrease bas Manufacturing	time after your curr ed upon the reporting Importing	ent corporate fiscal year's production
CBI [_]	year, estimate the inc	Hanufacturing Quantity (kg)	time after your curr sed upon the reporting Importing Quantity (kg)	ent corporate fiscal year's production Processing Quantity (kg)
CBI [_]	year, estimate the ind volume.	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg) UK

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[] Mark (X) this box if you attach a continuation sheet.

2.09	listed substan substance duri	largest volume manufacturing or processing proceed, specify the number of days you manufactured and the reporting year. Also specify the average stype was operated. (If only one or two operates	or processed	the liste
CBI	·	·,		Average
' —'			Days/Year	Hours/Day
	Process Type #1	(The process type involving the largest quantity of the listed substance.)		
		Hanufactured	NA	NA
		Processed	250	16
	Process Type #2	(The process type involving the 2nd largest quantity of the listed substance.)		
		Manufactured	NA	NA NA
		Processed	<u>NA</u>	NA NA
	Process Type #3	(The process type involving the 3rd largest quantity of the listed substance.)	١	1
		Manufactured	NA .	NA NA
		Processed	NA	NA NA
2.10 BI	chemical. Haximum daily in	m daily inventory and average monthly inventory as stored on-site during the reporting year in ventory ventory inventory	the form of	ed a bulk kg
	Mark (X) this box	if you attach a continuation sheet.		

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2.11 <u>CBI</u>	the listed su tured, import means the sou	ed, or processed. The rce from which the byp	ons greater than O. source of byproducts roducts. conroducts	roducts, coproducts, or impurities present with s greater than 0.1 percent as it is manufac- ource of byproducts, coproducts, or impurities ducts, coproducts, or impurities are made or rryover from raw material, reaction product,					
	CAS No.	Chemical Name	Byproduct, Coproduct or Impurity ¹	Concentration (%) (specify ± % precision)	Source of By products, Coproducts, or Impurities				
	<u>UK</u>	UK	UK	UK	UK				
	~~~~~~~~~								
	Use the follo B = Byproduct	wing codes to designate	e byproduct, coproc	luct, or impurity	<b>!</b>				
	C = Coproduct I = Impurity								

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[[]_] Mark (X) this box if you attach a continuation sheet.

<b>a.</b>	b. % of Quantity Manufactured, Imported, or	c. % of Quant Used Capti	vely
Product Types ¹ K	Processed 100	0n-Sit	Type of End-Use
 ¹ Use the following code		ect types:	
A = Solvent B = Synthetic reactant C = Catalyst/Initiator Sensitizer D = Inhibitor/Stabiliz Antioxidant B = Analytical reagent F = Chelator/Coagulant G = Cleanser/Detergent H = Lubricant/Friction agent I = Surfactant/Emulsif J = Flame retardant K = Coating/Binder/Adh Use the following code I = Industrial	c/Accelerator/ ser/Scavenger/ c/Sequestrant c/Degreaser a modifier/Antivear cier desive and additives	L = Moldable/C M = Plasticize N = Dye/Pigmen O = Photograph and additi P = Blectrodep Q = Fuel and for R = Explosive S = Fragrance/I T = Pollution U = Functional V = Metal allog W = Rheological X = Other (spec	t/Colorant/Ink and additic/Reprographic chemical ves osition/Plating chemical uel additives chemicals and additives Flavor chemicals control chemicals fluids and additives y and additives and additives and additives to the state of the sta

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3	Expected Product Types import, or process usi corporate fiscal year. import, or process for substance used during used captively on-site types of end-users for explanation and an exa	ng the listed subst For each use, specach use as a percent the reporting year. as a percentage of each product type.	ance at any time after cify the quantity you entage of the total was also list the quant the value listed und	r your current expect to manufact olume of listed ity of listed subst er column b and t
	<b>a.</b>	<b>b.</b>	c.	d.
	Product Types ¹	% of Quantity Manufactured, Imported, or Processed	% of Quantity Used Captively On-Site	Type of End-Use
	K	100	100	NA
			· · · · · · · · · · · · · · · · · · ·	
				1'1
	Use the following code  A = Solvent B = Synthetic reactant C = Catalyst/Initiator Sensitizer D = Inhibitor/Stabiliz Antioxidant E = Analytical reagent F = Chelator/Coagulant G = Cleanser/Detergent H = Lubricant/Priction agent I = Surfactant/Emulsif J = Flame retardant K = Coating/Binder/Adh	:  :/Accelerator/ :er/Scavenger/  :/Sequestrant /Degreaser :modifier/Antiwear ier esive and additives	L = Moldable/Castabl H = Plasticizer N = Dye/Pigment/Colo O = Photographic/Rep and additives P = Electrodepositio Q = Fuel and fuel ad R = Explosive chemic S = Fragrance/Flavor T = Pollution contro U = Functional fluid V = Metal alloy and V = Rheological modi X = Other (specify)	e/Rubber and addit brant/Ink and addit brographic chemical on/Plating chemical ditives als and additives chemicals 1 chemicals s and additives additives
	A = Solvent B = Synthetic reactant C = Catalyst/Initiator Sensitizer D = Inhibitor/Stabiliz Antioxidant E = Analytical reagent F = Chelator/Coagulant G = Cleanser/Detergent H = Lubricant/Friction agent I = Surfactant/Emulsif J = Flame retardant	/Accelerator/ er/Scavenger/ /Sequestrant /Degreaser modifier/Antiwear ier esive and additives s to designate the  CS = Cons	L = Moldable/Castabl M = Plasticizer N = Dye/Pigment/Colo O = Photographic/Rep and additives P = Electrodepositio Q = Fuel and fuel ad R = Explosive chemic S = Fragrance/Flavor T = Pollution contro U = Functional fluid V = Metal alloy and V = Rheological modi X = Other (specify)  type of end-users:	e/Rubber and addit brant/Ink and addit brographic chemical m/Plating chemicals ditives als and additives chemicals 1 chemicals s and additives additives fier

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( ) , ( ) , ( ) **(** 

	ь.	Average X	d.
Product Type ¹	Final Product's Physical Form	Composition of Listed Substance in Pinal Product	Type of End-Use
NA NA	NA NA	NA	NA
Use the following con  A = Solvent  B = Synthetic reactant  C = Catalyst/Initiate  Sensitizer  D = Inhibitor/Stabilit  Antioxidant  B = Analytical reagen  F = Chelator/Coagulant  G = Cleanser/Detergen	nt Dr/Accelerator/ .zer/Scavenger/ nt	L = Moldable/Castable/ M = Plasticizer N = Dye/Pigment/Colorar O = Photographic/Repropand additives P = Electrodeposition/ Q = Puel and fuel addit R = Explosive chemicals S = Fragrance/Flavor chamand	nt/Ink and ad graphic chemicals chemicals
H = Lubricant/Friction agent I = Surfactant/Emulsi J = Flame retardant		U = Functional fluids a V = Metal alloy and add V = Rheological modifie X = Other (specify)	and additives
H = Lubricant/Frictio agent I = Surfactant/Emulsi J = Flame retardant K = Coating/Binder/Ad	hesive and additives	<pre>V = Metal alloy and add V = Rheological modifie X = Other (specify)</pre>	and additives litives er
H = Lubricant/Frictio agent I = Surfactant/Emulsi J = Flame retardant K = Coating/Binder/Ad	hesive and additives  es to designate the  F2 = Crys  F3 = Gran  F4 = Othe  G = Gel	<pre>V = Metal alloy and add W = Rheological modifie X = Other (specify) final product's physical talline solid ules</pre>	and additives litives er
H = Lubricant/Frictionagent I = Surfactant/Emulsi J = Flame retardant K = Coating/Binder/Ad  Use the following code A = Gas B = Liquid C = Aqueous solution D = Paste E = Slurry	hesive and additives  es to designate the  F2 = Crys  F3 = Gran  F4 = Othe  G = Gel  H = Othe	V = Metal alloy and add V = Rheological modifie X = Other (specify)  final product's physical talline solid ules r solid r (specify)	and additives litives er

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CBI	lis	cle all applicable modes of transportation used to deliver ted substance to off-site customers.	r bulk shipmen	nts of the							
(_)		:k									
	Railcar Barge, Vessel										
		line									
		e									
		r (specify) NA									
2.16 CBI	of e	omer Use Estimate the quantity of the listed substance repared by your customers during the reporting year for used use listed (i-iv).  gory of End Use	used by your se under each	customers category							
	i.	Industrial Products									
		Chemical or mixture	NA	h-/							
	ii.	Article									
	ii.	Article	NA ,	kg/yr							
	ii.	Connercial Products Chemical or mixture	NA NA	kg/yr kg/yr							
	ii. iii.	Commercial Products Chemical or mixture Article	NA NA	kg/yr kg/yr							
		Commercial Products Chemical or mixture Article	NA NA NA	kg/yr kg/yr kg/yr							
		Consumer Products  Chemical or mixture  Consumer Products  Chemical or mixture	NA NA NA	kg/yr kg/yr kg/yr kg/yr							
		Connercial Products Chemical or mixture	NA NA NA	kg/yr kg/yr kg/yr kg/yr							
	iii.	Commercial Products Chemical or mixture Article Consumer Products Chemical or mixture Article Other	NA NA NA NA	kg/yr kg/yr kg/yr kg/yr							
	iii.	Commercial Products Chemical or mixture Article Consumer Products Chemical or mixture Article	NA NA NA NA NA	kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr							
	iii.	Commercial Products Chemical or mixture  Article  Consumer Products Chemical or mixture  Article  Other  Distribution (excluding export)  Export	NA NA NA NA NA NA	kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr							
	iii.	Commercial Products  Chemical or mixture  Article  Consumer Products  Chemical or mixture  Article  Other  Distribution (excluding export)	NA NA NA NA NA NA NA NA NA	kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr kg/yr							

C:

SECTION 3	PRO	CESSOR	RAV	MATERIAL	IDENTIFICATION
			<del></del>		

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3.01 Specify the quantity purchased and the average price for each major source of supply listed. Product trad The average price is the market value of the product substance.	paid for the lis les are treated a that was traded	ted substance is purchases. for the listed
Source of Supply	Quantity (kg)	Average Pric (\$/kg)
The listed substance was manufactured on-site.	NA	_ NA
The listed substance was transferred from a different company site.	NA	. NA
The listed substance was purchased directly from a manufacturer or importer.	262.864	56/KG
The listed substance was purchased from a distributor or repackager.	NA	NA .
The listed substance was purchased from a mixture producer.	NA	III NA
Circle all applicable modes of transportation used to your facility.  Truck  Railcar  Barge, Vessel  Pipeline  Other (specify)		
] Mark (X) this box if you attach a continuation sheet.		

3.03 a CBI	Circle all applicable containers used to transport the listed subs facility.	tance to	your
( <u> </u>	Bags	• • • • • • • • •	1
	Boxes	• • • • • • • •	2
	Pree standing tank cylinders	• • • • • • • • •	3
	Tank rail cars	••••••	(4
	Hopper cars	•••••	5
	Tank trucks	•••••	6
	Hopper trucks	• • • • • • • •	7
	Drums	• • • • • • • •	8
	Pipeline	•••••	9
	Other (specify)	* * * * * * * * *	10
b.	If the listed substance is transported in pressurized tank cylinder cars, or tank trucks, state the pressure of the tanks.		
	Tank cylinders	¹ 1NA	mmHg
	Tank rail cars	NA NA	malig
	Tank trucks	NA_	malig

Ex

PART B	RAV	MATERIAL	IN	THE	PORM	OP	A	MIXTURE
--------	-----	----------	----	-----	------	----	---	---------

(1)

3.04 If you obtain the listed substance in the form of a mixture, list the trade name(s) of the mixture, the name of its supplier(s) or manufacturer(s), an estimate of the average percent composition by weight of the listed substance in the mixture, and the amount of mixture processed during the reporting year.

*(* . .

Trade Name	Supplier or Manufacturer	Average % Composition by Weight (specify ± % precision)	Amount Processed (kg/yr)
NA	NA	NANA	· NA
NA	NA	NA NA	NA
NA	NA	NA NA	NA
NA NA	NA	NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

Class I chemical         262,864         98           NA         NA         NA           NA         NA         NA           Class II chemical         NA         NA           NA         NA         NA           Polymer         NA         NA           NA         NA         NA           NA         NA         NA		Quantity Used (kg/yr)	<pre>% Composition by Veight of Listed Sub- stance in Raw Material (specify ± % precision</pre>
NA	Class I chemical	262,864	·
NA		NA	NA
NA N		NA	NA
NA N	Class II chemical	NA	NA
NA N		NA NA	
NA NA NA		NA	NA
NA NA	olymer	NA	NA.
NA NA		NA NA	
		NA	NA
		•	

[ ] Mark (X) this box if you attach a continuation sheet.

# SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

A	•	_		_	
Genera	1	ne:	P 12 14		-
~~…~~					UHEL

(,...

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard varning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART	A	PHYSICAL/	CHEMICAL	DATA	SIMMARY
• • • • • •	**	- HIJIOND/	CUPUTOWE	אואט	SUMMAKY

4.01	Specify the percent purity for the three major technical grade(s) of the listed
	- TOURING 45 IL 15 MANUISCINIPO, IMPORTAN OF PROGRAMM MARKET I
[-]	import the substance, or at the point you begin to process the substance.

	Manufacture	Import	Process		
Technical grade #1	NA 2 purity	NA % purity	<u>98</u> % purity		
Technical grade #2	NA 2 purity	NA z purity	NA Purity		
Technical grade #3	NA Z purity	NA z purity	NA Z purity		

¹ Major = Greatest quantity of listed substance manufactured, imported or processed.

1	it your most recently updated Material Safety Data Sheet (MSDS) for the listed cance, and for every formulation containing the listed substance. If you possess SDS that you developed and an MSDS developed by a different source, submit your con. Indicate whether at least one MSDS has been submitted by circling the priate response.
---	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Ies	<i>(</i> 1 )
No	2
Indicate whether the MSDS was developed by your company or by a different source.	
Your company	1
Another source	(2)

[_]	Mark	(X)	this	pox	if	you	attach	a	continuation	sheet
-----	------	-----	------	-----	----	-----	--------	---	--------------	-------

Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.
Yes 1
No (2)

(

4.04 For each activity that uses the listed substance, circle all the applicable number(s) corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

	Physical State							
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas			
Manufacture	1	2	3	4	5			
Import	1	2	3	4	5			
Process	1	2	(3)	4 11.	5			
Store	1	2	(3)	4	5			
Dispose	1	2	3	4	5			
Transport	1	2	3	4	5			

^[ ] Mark (X) this box if you attach a continuation sheet.

4.05 Particle Size -- If the listed substance exists in particulate form during any of the following activities, indicate for each applicable physical state the size and the percentage distribution of the listed substance by activity. Do not include importing and processing activities at the time you import or begin to process the listed substance. Heasure the physical state and particle sizes for manufacturing storage, disposal and transport activities using the final state of the product.

**(** 

Physica State	1	Manufacture	Import	Process	Store	Dispose	Transmana
Dust	<1 micron	NA	NA	NA	NA NA	NA	Transport NA
	1 to <5 microns	NA	NA	NA	NA	NA NA	NA NA
	5 to <10 microns	NA	NA	NA	NA	NA	NA
Povder	<1 micron	NA	NA ·	NA	NA	NA	NA
	1 to <5 microns	NA	NA	NA	NA	NA	<del></del>
	5 to <10 microns	NA	NA	NA	NA NA	NA NA	NA NA
Fiber	<1 micron	NA	<u>NA</u>	NA	NA	NA_	NA
	1 to <5 microns	NA	NA	NA	NA NA	NA NA	
	5 to <10 microns	NA	NA	NA	NA .	NA NA	NA NA
Aerosol	<1 micron	NA	NA	NA	NA	NA	NA
	1 to <5 microns	NA	NA -	NA	NA NA	NA -	
	5 to <10 microns	NA NA	NA	NA_	NA _	NA NA	NA NA

^[ ] Mark (X) this box if you attach a continuation sheet.

SECTION	5	ENVIRONHENTAL	FATE
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**(**:

PART	A	RATE CONSTANTS AND TRANSFORMATION PRODUCTS			<del></del>						
5.01		Indicate the rate constants for the following transformation processes.  Photolysis:									
		Absorption spectrum coefficient (peak)	UK	(1/H cm) at	UK	nm .					
		Reaction quantum yield, &	UK	at .	IIK						
		Direct photolysis rate constant, k, at	UK	1/hr	IIK 1	– "" atitude					
	b.	Oxidation constants at 25°C:			OR 2	# ( 1 ( UUE					
		For 10 ₂ (singlet oxygen), k _{ox}	UK			1/N h					
		For RO ₂ (peroxy radical), k _{ox}	UK			- 1/N h					
	c.	Pive-day biochemical oxygen demand, BOD ₅	UK		<u></u>	_ =/! mg/l					
	d.	Biotransformation rate constant:				_ ~~					
		For bacterial transformation in water, $k_b \dots$	UK		4.1	1/hr					
		Specify culture	UK			, 4, 1,1					
,	e.	Hydrolysis rate constants:			*	1					
		For base-promoted process, k	UK			1/M hr					
		For acid-promoted process, k,	IIK			1/M hr					
		For neutral process, k _N	UK			1/hr					
1		Chemical reduction rate (specify conditions)_	UK								
2	·	Other (such as spontaneous degradation)	IIV								

Mark	<b>(X)</b>	this	box	if	you	attach		continuation	sheet
					,		•	CONTINUALION	SILENT.

	Specify the half-life	of the listed substi			
	Media	- or the Ilated Substi			
			Half-life (spec	ity uni	ts)
	Groundvater		UK		
	Atmosphere	<del></del>	UK		
	Surface water		ŪK		
	Soil	***	UK		
b.	Identify the listed sulife greater than 24 h	ubstance's known tran	sformation product	s that	have a half-
	CAS No.	Nane	Half-life (specify units)		<u> Hedia</u>
	UK	<u>UK</u>	UK	in	UK
				in	
				in	11
				in	······································
					<del>*************************************</del>
.03 Spec	ify the octanol-water	partition coefficient	, K	UK	at 25°0
Meth	od of calculation or de	etermination	•••••	UK	
.04 Spec	ify the soil-water part	tition coefficient, K	*****	UK	at 25°C
Soil	type		·	עוו	
				UK	
.05 Speci	ify the organic carbon-	vater partition			
COSI	icient, Koc	• • • • • • • • • • • • • • • • • • • •	•••••	UK	at 25°C
06 Speci	fy the Henry's Law Cons	stant, H		UK	atm-m³/mole
] Hark	(X) this box if you att	ach a continued			

5.07 List the bioconcentration factor (BCF) of the listed substance, the species for which it was determined, and the type of test used in deriving the BCF.

<b>Bioconcentration Factor</b>	Species	Test ¹
UK	UK	UK
UK	UK	UK
UK	UK	UK

¹Use the following codes to designate the type of test:

F = Flowthrough

S = Static

CBI	For each market listed below, state the listed substance sold or transfer	the quantity sold and the cred in bulk during the r	total sales value of eporting year.
''	Market	Quantity Sold or Transferred (kg/yr)	Total Sales Value (\$/yr)
	Retail sales		
	Distribution Wholesalers		
	Distribution Retailers		
	Intra-company transfer		
	Repackagers		
	Mixture producers	•	
	Article producers		
	Other chemical manufacturers or processors		· · · · · · · · · · · · · · · · · · ·
	Exporters		
	Other (specify)		N,
<b>BI</b> :	Substitutes List all known commerci for the listed substance and state the feasible substitute is one which is ec in your current operation, and which re performance in its end uses.	cost of each substitute	A commercially
'	Substitute		Cost (\$/kg)
-	UK		UK
_	UK		UK
_	IIK		IIK

6.

(_;

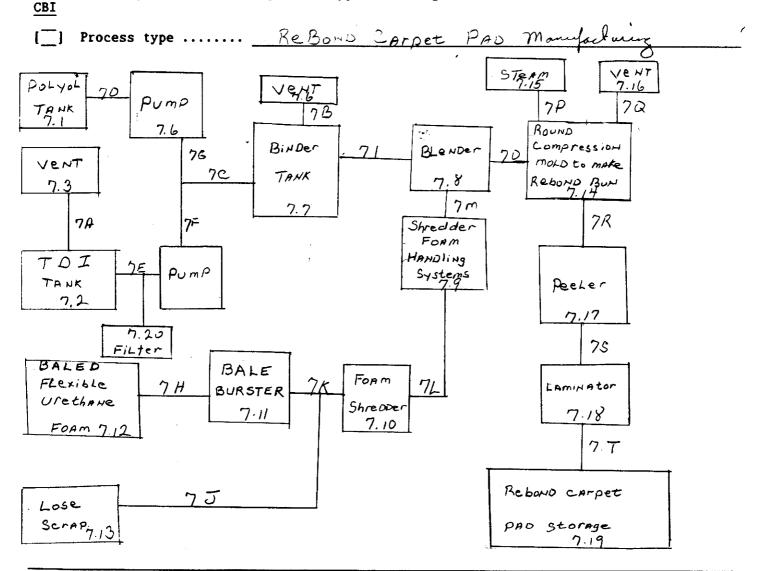
#### SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

#### General Instructions:

For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

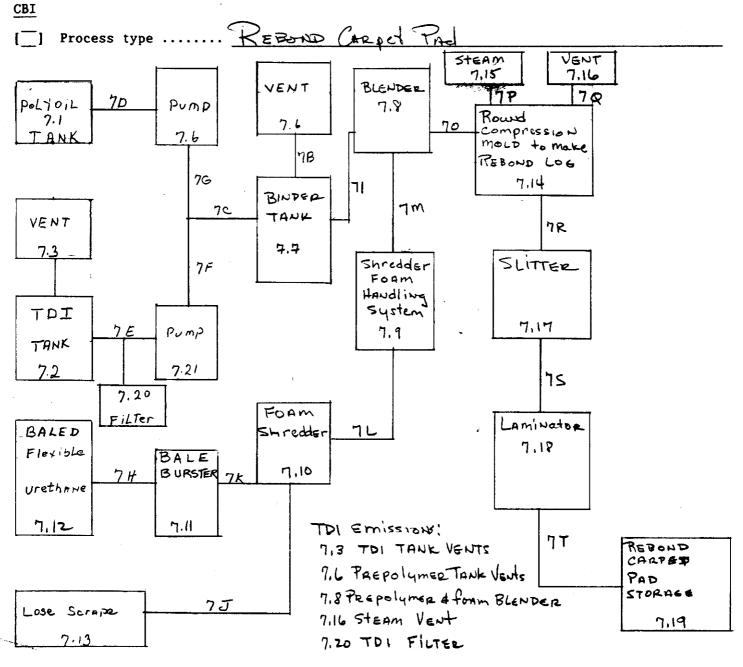
#### PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.



[ ] Mark (X) this box if you attach a continuation sheet.

7.03 In accordance with the instructions, provide a process block flow diagram showing all process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.



[ ] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

<u>CBI</u>

: , . , . **O** 

REBOND FOAM CARPET PAD MANUFACTURER

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Polyol Bulk Tank	20	Atmospheric	Stee1
7.2	TDI Bulk Tank	22	Atmospheric	Stee1
7.21	TDI Pump	Ambient	Atmospheric	Steel
7.6	Polyol Pump	Ambient	<u>Atmospher</u> ic	Steel
7.7	Binder Tank	Ambient	Atmospheric	Stee1
7.8	Blender Shredded Foam	Ambient	<u>Atmospher</u> ic	Stee1
7.9	Handling System	Ambient	NA	Stee1
7.10	Foam Shredder	Ambient	NA	Steel
7.11	Bale Burster	Ambient	NA	Steel
7.17	Slitter	Ambient	NA	Stee1

 $^{[\}overline{X}]$  Mark (X) this box if you attach a continuation sheet.

7.04 <u>CBI</u>	Describe the process bloc than one process type	typical equipment typick flow diagram(s). If the company to the co	pes for each unit ope a process block flo this question and com	ration identifie v diagram is pro plete it separat	d in your vided for mor ely for each
[_]	Process type	REBOND FO	DAM CARPET PAD MANUF.	ACTURER	
	Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Compositi
	7.18	Laminator	Ambient	NA	Stee1
		<del></del>	-		
					-
•					
•					
-					
	·				

C.

CBI		complete it separately for each		
(_)	Process type REBOND CARPET PAD MANUFACTURING			
	Process Stream ID Code	Process Stream Description	Physical State ¹	Stream Flow (kg/y
	7R 7S 7T	Rebond Foam Carpet Pad	SO	UK
	7B 7Q 7P	Vents	GU	13.14
	7A	Vent (TDI Bulk Tank)	GU	4.29
				i ii
				<del></del>
	Use the follow	ring codes to designate the physi	ical state for each proc	cess stream:
	GC = Gas (cond GU = Gas (unco SO = Solid SY = Sludge or AL = Aqueous 1: OL = Organic 1:	iquid	and pressure) e and pressure)	
	GC = Gas (cond GU = Gas (unco SO = Solid SY = Sludge or AL = Aqueous 1: OL = Organic 1:	ensible at ambient temperature andensible at ambient temperature slurry iquid	and pressure) e and pressure)	
	GC = Gas (cond GU = Gas (unco SO = Solid SY = Sludge or AL = Aqueous 1: OL = Organic 1:	ensible at ambient temperature andensible at ambient temperature slurry iquid	and pressure) e and pressure)	

<u>C</u>

(e)

7.06 CBI	If a process block flow diagram is provided for more than one process type, photocop this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)									
[_]		pe REBOND								
	<b>a.</b>	<b>b.</b>	c.	d.	e.					
	Process Stream ID Code	Known Compounds	Concen- trations ^{2,3} (% or ppm)	Other Expected Compounds	Estimated Concentrations (% or ppm)					
	7D 7G	Polyo1	_100%	NA	NA					
	7E 7F	TDI	98%	UK	UK					
					ľ					
•	7C 7I	Polyol, TDI	UK	UK	UK					

7.06 continued below

[[]X] Mark (X) this box if you attach a continuation sheet.

Process t	REBOND	C.	FACTURER	
Process Stream ID Code	Knovn Compounds ¹	Concentrations ^{2,3} (% or ppm)	Other Expected Compounds	Estimated Concentration (% or ppm)
70	Shredded Foam	UK	UK	UK
	TDI,	UK	UK	UK
	Polyol	IJK	LIK	IIK
<u>7R</u>	Rebond Carpet Pad	100%	NA.	NA
75	D-1 - 1 0			11
<u>7S</u>	Rebond Carpet Pad	100%	NA	NA NA

7.06 continued below

[[]X] Mark (X) this box if you attach a continuation sheet.

t <u></u> 1		REBOND CA								
	REBOND CARPET PAD MANUFACTURER.									
	-	<b>b.</b>	c.	d.	••					
	Process Stream ID Code	Known Compounds	Concen- trations ^{2,3} (X or ppm)	Other Expected Compounds	Estimated Concentrations(% or ppm)					
	<u>7T</u>	Rebond Carpet Pad	100%	NA	NA NA					
		•								
•					11					
.06	continued be	alow								
	ark (X) this	s box if you attach a co	ntinuation sheet	•						

## 7.06 (continued)

Œ.

Por each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column b. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

Additive Package Number	Components of Additive Package	Concentrations (% or ppm)
1	NA NA	NA NA
2		
3		
		<u></u>
4		<del></del>
		-
5		-
e the following codes	to designate how the concentrati	an inn data-t-t

	Mark	(X)	this	box	if	you	attach a	continuation	sheet.
--	------	-----	------	-----	----	-----	----------	--------------	--------

²U

A = Analytical result

E = Engineering judgement/calculation

³Use the following codes to designate how the concentration was measured:

V = Volume

V = Veight

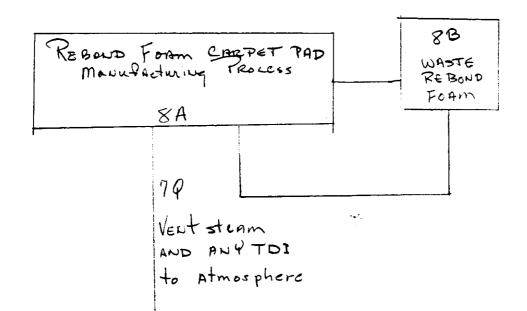
#### PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagram which describes the treatment process used for residuals identified in question 7.01.

CBI

1.1.

[] Process type ...... REBOND FORM CARpet PAd mfg.



[ ] Mark (X) this box if you attach a continuation sheet.

8.05 <u>CBI</u>	process	M(s). If a : S type, photo	residual trea ocody this du	tment block f estion and co	in your residu low diagram is mplete it sepa r explanation	provided for	more than on
[_]	Process	type	REBO	OND FOAM CARP	ET PAD MANUFAC	TURER	
	8.	b.	c.	d.	e.	f.	g.
	Stream ID Code	Type of Hazardous Vaste	Physical State of Residual ²	Known Compounds ³	Concentra- tions (% or ppm) 4,5,6	Other Expected Compounds	Estimated Concentrations (% or ppm)
	7.20	T	SO	Urea	UK	UK	UK
				***************************************		******	
	•						
						**************************************	-
		******					
							-
							**************************************
.05 d	ontinue	d below					

t., e., 👀

## 8.05 (continued)

¹Use the following codes to designate the type of hazardous waste:

I = Ignitable

C = Corrosive

R = Reactive

E = EP toxic

T = Toxic

H = Acutely hazardous

²Use the following codes to designate the physical state of the residual:

GC = Gas (condensible at ambient temperature and pressure)

GU = Gas (uncondensible at ambient temperature and pressure)

SO = Solid

SY = Sludge or slurry

AL = Aqueous liquid

OL = Organic liquid

IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

#### 8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05	(continued)
V. V. 1	( CAII ( TII ACA )

³For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column d. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

6...

Components of Additive Package	Concentrations (% or ppm)
NA	NA
·	
· · · · · · · · · · · · · · · · · · ·	
<del></del>	
	·
s to designate how the concentratio	n was determined:
ent/calculation	
	Additive Package  NA  NA  The state of the concentration of the concentr

## 8.05 (continued)

⁵Use the following codes to designate how the concentration was measured:

(:

V = Volume

V - Veight

⁶Specify the analytical test methods used and their detection limits in the table below. Assign a code to each test method used and list those codes in column e.

Code	<u>He thod</u>	Detection Limit(± ug/l)
1_	UK	UK
	UK	UK
_3	UK	<u>UK</u>
4	UK	UK
_5	UK	UK
<u>6</u>	UK	lùk

^[ ] Mark (X) this box if you attach a continuation sheet.

CBI [_]	Process	type	··· REE	SOND FOAM CAF	PET PAD N	"  !ANUFACTUR	ER	
		b.	c.	d.	•	!•	f.	g.
	Stream ID Code	Waste Description Code	Management Method Code ²	Residual Quantities (kg/yr)	of Resi	gement dual (%) Off-Site	Costs for Off-Site Hanagement (per kg)	Changes in Management Methods
	7Q	<u>B-91</u>	<u>M-5</u>	4.29	<u>NA</u>	NA	NA	None
								*
			-				***************************************	-
	***************************************							
			<del></del>					
								•
	¹ Use the	codes provi	ded in Exhi	bit 8-1 to de bit 8-2 to de	esignate :	the vaste o	iescriptions	

**6.** 

		CI	bustion namber nture (°C)	Temp	tion of erature nitor	In Cor	ence Time abustion (seconds)
	Incinerator	Primary	Secondary	Primary	Secondary	Primary	Seconda
	1						
	2						
	3						
	Indicate by circl	if Office ing the app	of Solid Wast ropriate resp	e survey has	s been submit	ted in lieu	of respons
	Yes	•••••	••••••	• • • • • • • • • • •	••••••	••••••	•••••
	No	• • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • •	•••••	••••
<u> </u>	Complete the fare used on-si treatment block	te to buth	ram(s). Air Pol	lution	(by capacity in your proce	ess block or Types	residual
CBI		te to buth	ram(s).	lution	(by capacity in your proce	Types Emissions Availa	residual of Data
<b>78</b> 1	Incinerator	te to buth	Air Pol	lution	(by capacity in your proce	ess block or Types Emissions	residual of Data
8.23 <u>CBI</u> [_]	Incinerator	te to buth	Air Pol	lution	(by capacity in your proce	Types Emissions Availa	residual of Data
<u>CBI</u>	Incinerator  1 2 3 Indicate	k flow diag	Air Pol Control  NA	lution Device	in your proce	Types Emissions Avails  NA  NA  NA	presidual of Data
CBI	Incinerator  1 2 Indicate by circli	if Office o	Air Pol Control NA NA NA Solid Vaste	lution Device ¹	been submitt	Types Bmissions Avails  NA  NA  NA  NA  OA  OA  OA  OA  OA  OA	of Data
<u>CBI</u>	Incinerator  1 2 3 Indicate by circli Yes	if Office o	Air Pol Control  NA  NA  NA  Solid Waste opriate respo	lution Device survey has	been submitt	Types Emissions Avails  NA  NA  NA  NA  NA  NA  NA  NA  NA  N	of Data

(4)

# PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records on the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the records for that data element are maintained. (Refer to the instructions for further explanation and an example.)

Ī	Data are Ma Mourly	intained for Salaried	Year in Which Data Collection	Number of
Data Element	Vorkers	Workers	Began	Years Records Are Maintained
Date of hire	<u> </u>	<u> </u>	1972	5
Age at hire	<u> </u>	<u> </u>	1972	5
Work history of individual before employment at your facility	NA	NA	NA NA	NA
Sex	Х	X	1972	
Race	X	X	1972	5
Job titles	X	X	1972	5
Start date for each job title	NA	NA	NA	NA
End date for each job title	NA	NA	NA NA	NA
Work area industrial hygiene monitoring data	X	X	1984	5
Personal employee monitoring data	<u>NA</u>	NA	NA	NA
Employee medical history	NA	<u>NA</u>	NA	NA
Employee smoking history	NA	<u>NA</u>	NA NA	NA
Accident history	<u> </u>	<u> X</u>	1972	5
Retirement date	NA	NA	NA	NA
Termination date	<u> </u>	<u> X</u>	1972	5
Vital status of retirees	<u>NA</u>	NA	NA	NA
Cause of death data	NA	NA	NA NA	NA

^[ ] Mark (X) this box if you attach a continuation sheet.

9.02 In accordance with the instructions, complete the following table for each activity in which you engage.

CBI

[_]

€.

<b>a.</b>	ь.	<b>c.</b> /	d.	e.
Activity	Process Category	Yearly Quantity (kg)	Total Workers	Total Vorker-Hours
Manufacture of the listed substance	Enclosed	NA	NA	NA
	Controlled Release	NA	NA	NA
	0pen	NA	NA	NA
On-site use as reactant	Enclosed	NA	NA	NA
	Controlled Release	262,864	_4	16,000
	0pen	NA	NA	NA
On-site use as	Enclosed	NA NA	NA	NA
	Controlled Release	NA	NA	NA
	0pen	NA	NA	1 NA
On-site preparation of products	Enclosed	NA	NA	NA
•	Controlled Release	NA	NA	NA
	0pen	<u>NA</u>	NA	NA

^[ ] Mark (X) this box if you attach a continuation sheet.

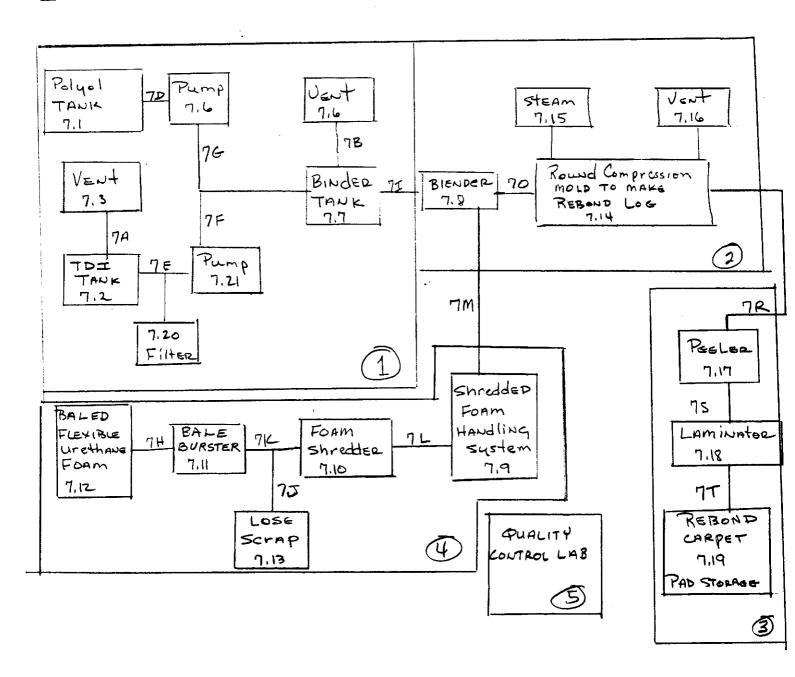
encompasses vorke listed substance.	tive job title for each labor category at your facility that rs who may potentially come in contact with or be exposed to the
<u>I</u> -,	
Labor Category	Descriptive Job Title
<b>A</b>	Supervisor Rebond Operations
В	Slitter Operator
C	Extruder Operator
D	Blender Operator
B	Chemical Processor
<b>?</b>	Quality Control
G	<u>'</u>
H	
I	
J	1
	*

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

Fa 4 11 13

[] Process type ..... REBOND CARPET PAD MANUFACTURET



[ ] Mark (X) this box if you attach a continuation sheet.

Description of Work Areas and Worker Activities  Pumping-Binding System, Crew operates controls.  Blender-Mold Reaction Area, Crew controls operation.  Peeler-Laminator, Crew operates machinery.
Pumping-Binding System, Crew operates controls.  Blender-Mold Reaction Area, Crew controls operation.
Blender-Mold Reaction Area, Crew controls operation.
Peeler-Laminator. Crew operates machinery.
10101 Damingoot, 020 Special S
Scrap Preparation, Crew readies scrap for rebond operation.
Ouality Control Lab.

[ ] Mark (X) this box if you attach a continuation sheet.

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Process type REBOND CARPET PAD MANUFACTURER  Vork area							
Labor Category	Number of Vorkers Exposed	Hode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance	Average Length of Exposure Per Day	Number o Days per Year Exposed		
A	1	Inhalation	OL	E	250		
В	2	N/A	N/A	N/A	N/A		
С	11	Inhalation	OL	E	250		
D	<u> </u>	Inhalation	OL	E	250		
E	1	Inhalation	OL	E	250		
F	1	N/A	N/A	N/A	N/A		
the point of temper of tem	condensible a crature and projuncondensible erature and projudes fumes, values	essure)  at ambient  essure;  pors, etc.)  to designate averag  tes, but not  r, but not	Y = Sludge or sl L = Aqueous liqu L = Organic liqu L = Immiscible l (specify pho 90% vater, 1	lurry  id  id  liquid  ases, e.g.,  lOX toluene)  osure per day:  2 hours, but  nours  4 hours, but	not		

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DAD MANUEACTÚDED
DAD MANITEACTIDED
PAD MANUFACTURER
1
Level 15-Minute Peak Exposure Level (ppm, mg/m', other-specify)
UK
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 $[\overline{\underline{X}}]$  Mark (X) this box if you attach a continuation sheet.

	Process type	REBOND CARPET PAD MANUFACTU	RER '
	Work area		2
	Labor Category	8-hour TVA Exposure Level (ppm, mg/m, other-specify)	15-Hinute Peak Exposure Level (ppm, mg/m , other-specify)
	A	.016 PPM	UK
	В	UK	<u> </u>
	C	001_PPM	UK
	D	.010 PPM	UK
	E	.024 PPM	UK
•	F	<u>UK</u>	UK
•			, 1
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[[]X] Hark (X) this box if you attach a continuation sheet.

	Process type	••REBOND_CARPET_PAD_MANUFAC	י. פיבוס וידי
·	Vork area		3
	Labor Category	8-hour TVA Exposure Level (ppm, mg/m', other-specify)	15-Winute Peak Exposure Level (ppm, mg/m', other-specify)
	<u> </u>	.016 PPM	UK
	В	UK	UK
	C	.001 PPM	UK
	D	.010 PPM	<u> </u>
	E	.024 PPM	IIK
	<u> </u>	UK	UK
			,,1

 $[\overline{\chi}]$  Mark (X) this box if you attach a continuation sheet.

Process type	REBOND CARPET PAD MANUFACT	urer'
Vork area	8-hour TVA Exposure Level (ppm, mg/m , other-specify)	15-Hinute Peak Exposure Level (pps, mg/m , other-specify)
A	.016 PPM	UK
В	UK	UK
C	.001 PPM	UK
D	.010 PPM	UK
Е	.024 PPM	UK
F	UK	UK

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C:

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### PART B WORK PLACE MONITORING PROGRAM

9.08 If you monitor worker exposure to the listed substance, complete the following table.

<u>CBI</u>

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples 1	Analyzed In-House (Y/N)	Number of Years Records Maintained
Personal breathing zone	NA	NA NA	NA	NA	<u>NA</u>	NA NA
General work area (air)	1-2		5		<u>N</u>	5
Wipe samples	NA_	<u>NA</u>	<u>NA</u>	NA	NA	NA NA
Adhesive patches	NA	<u>NA</u>	NA	<u>NA</u>	NA	<u>NA</u>
Blood samples	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	NA	<u>NA</u>
Urine samples	NA	NA	NA	NA	NA	NA
Respiratory samples	UK	1	1	<u>D</u>	N	15
Allergy tests	NA	<u>NA</u>	NA	<u>NA</u>	NA	NA
Other (specify)						
	NA	NA	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Other (specify)						
	<u>NA</u>	NA	NA	<u>NA</u>	NA	NA
Other (specify)						
	NA	NA	NA	NA	NA	<u>NA</u>

¹Use the following codes to designate who takes the monitoring samples:

- A = Plant industrial hygienist
- B = Insurance carrier
- C = OSHA consultant
- D = Other (specify) SUPPLIER

<u>[_</u> ]	Mark (X) this box if you attach a continuation sheet.	7	
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	Sample Type	<u>s</u>	ampling and Analytic	al Methodolo	DEY			
	Breathing Zone Impregnated paper tape, analyzed with an integrated re							
	General Work Area	(Air) Impregnated	paper tape, analyze	d with an in	tegrated reade			
9.10	If you conduct person specify the following	nal and/or ambient g information for o	air monitoring for each equipment type	the listed s used.	ubstance,			
CBI	Equipment Type ¹	Detection Limit ²	<b>Hanufacturer</b>	Averaging Time (hr)	Model Number			
`·	E	0-1000 ppb	GMD Systems, Inc.	2.5 hrs.	MCM-4000			
					- 11			
	E = Stationary moni F = Stationary moni G = Stationary moni H = Mobile monitori I = Other (specify)  Use the following c A = ppm	tion tube with pumpodes to designate a tors located within tors located within tors located at plang equipment (special	mbient air monitori n work area n facility ant boundary	ing equipment	types:			

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Test Descri			Prequency monthly, yearly UK	
			1	
			1	
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	k (X) this box if vo	k (V) this hav if you attach a co		k (X) this box if you attach a continuation sheet.

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PART	PART C ENGINEERING CONTROLS						
9.12 CBI	Describe the engineering conto the listed substance. Piprocess type and work area.	ntrols that you	u use to reduce o question and comp	r eliminate vor lete it separat	rker exposure ely for each		
	Process type REBOND CARPET PAD MANUFACTURER						
·—,	Work area		1,				
	Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded		
	Ventilation:						
	Local exhaust	<u> </u>	UK	<u> </u>	NA		
	General dilution	<u>Y</u>	UK	N	NA		
	Other (specify)		•				
		NA	NA	<u>NA</u>	NA		
	Vessel emission controls	NA	NA	<u> </u>	NA		
	Mechanical loading or packaging equipment	<u>NA</u>	NA NA	NA	NA NA		
	Other (specify)						
		NA	NA	NA	NA		

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 $^{[\}overline{X}]$  Mark (X) this box if you attach a continuation sheet.

PART	PART C ENGINEERING CONTROLS								
9.12 CBI	Describe the engineering con to the listed substance. Ph process type and work area.	itrols that you	u use to reduce o question and comp	r eliminate voi lete it separa	rker exposure tely for each				
	Process type	REBOND CA	RPET PAD MANUFAC	ΓURER					
	Work area			••2	-				
	Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded				
	Ventilation:								
	Local exhaust	Y	<u>uk</u>	N	<u>NA</u>				
	General dilution	Y	<u>UK</u>	N	NA				
	Other (specify)		•						
		<u>NA</u>	NA	<u>NA</u>	<u>NA</u>				
	Vessel emission controls	<u>NA</u>	NA	NA	NA				
	Mechanical loading or packaging equipment	NA	NA	NA	NA NA				
	Other (specify)			,					
		NA	NA NA	NA	NA				

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[[]X] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS					
9.12 CBI	Describe the engineering con to the listed substance. Ph process type and work area.	trols that you	use to reduce or question and comp	r eliminate voi lete it separat	rker exposure tely for each
(_)	Process type	REBOND C	CARPET PAD MANUFA	CTURER	
	Vork area	•••••		. 3	
	Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
	Ventilation:				
	Local exhaust	<u> </u>	<u>UK</u>	N	NA
	General dilution	<u>Y</u>	<u> </u>	N	NA
	Other (specify)		•		
		NA NA	NA NA	NA	<u>NA</u>
	Vessel emission controls	NA	<u>NA</u>	NA	NA
	Mechanical loading or packaging equipment	NA NA	NA	<u>NA</u>	NA NA
	Other (specify)				
		NA	NA	<u>NA</u>	NA

[ $\overline{X}$ ] Mark (X) this box if you attach a continuation sheet.

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PART	PART C ENGINEERING CONTROLS					
9.12 CBI	Describe the engineering co to the listed substance. P process type and work area.	hotocopy this (	use to reduce o question and comp	r eliminate von lete it separat	ker exposure ely for each	
	Process type	REBOND CA	ARPET PAD MANUFAC	TURER		
<b>'</b> '	Work area				· · · · · · · · · · · · · · · · · · ·	
	Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded	
	Ventilation:					
	Local exhaust	Y	UK	<u>N</u>	<u>NA</u>	
	General dilution	Y	UK	N	NA	
	Other (specify)		•			
		NA	NA	<u>NA</u>	NA	
	Vessel emission controls	NA	NA	NA	NA	
	Mechanical loading or packaging equipment	NA	NA	NA NA	NA	
	Other (specify)					
		NA	NA	NA	NA	

[ ] Mark (X) this box if you attach a continuation sheet.

BI	Describe all equipment or process modifications you have ma prior to the reporting year that have resulted in a reducti the listed substance. For each equipment or process modifi the percentage reduction in exposure that resulted. Photoc complete it separately for each process type and work area.	on of worker exposure cation described, stat opy this question and
_1	Process type REBOND CARPET PAD MANUFACTURER	
	Vork area	1
	Equipment or Process Modification	Reduction in Worker Exposure Per Year (%
	NA	NA
		,1
		, i

I	the listed substance. For each equipment or process mod the percentage reduction in exposure that resulted. Pho complete it separately for each process type and work ar	tocopy this question and the control of the control
	Process type REBOND CARPET PAD MANUFACT	TURER
	Work area	:
	Equipment or Process Modification	Reduction in Worker Exposure Per Year (X)
	NA	NA
		•
		<b>∤</b>
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k area		s Hodificatio			on in Worker Per Year (%)
Equipme	NA	s Modificatio	<b>a</b>	Exposure	
	NA				
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l ] Proc	ess type	REBONI	D CARPET PAD MANUFAC	; ΓURER	
_	area	•••••	••••	. 5	
	Equipme	nt or Process Mod	ification		in Worker Per Year (%)
		NA		NA NA	
-				,	·
	· · · · · · · · · · · · · · · · · · ·		100		
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PART	ART D PERSONAL PROTECTIVE AND SAFETY EQUIPHENT					
9.14 31	Describe the personal protective and safety equin each work area in order to reduce or eliminal substance. Photocopy this question and complete and work area.	ripment that your te their exposur te it separately	r workers wear or use re to the listed for each process type			
_1	Process type REBOND CARPET PAD M	IANUFACTURER				
	Vork area		1			
	Equipment Types	Vear or Use (Y/N)				
	Respirators	N				
	Safety goggles/glasses	Y				
	Face shields	N				
	Coveralls	N				
	Bib aprons	N	į 1			
	Chemical-resistant gloves	Y				
	Other (specify)		1			
	Supplied Air Pos. Press	Y				

 $[\overline{X}]$  Mark (X) this box if you attach a continuation sheet.

9.14	Describe the personal protective and safety eq in each work area in order to reduce or elimin substance. Photocopy this question and comple and work area.					
<u>CBI</u>						
	Process type REBOND CARPET PAD MANUFACTURER					
	Work area	• • • • • • • • • • • • • • • • • • • •	2			
	Equipment Types	Vear or Use (Y/N)				
	Respirators	N				
	Safety goggles/glasses	Y				
	Face shields	N				
	Coveralls	N				
	Bib aprons	N	11			
	Chemical-resistant gloves	N	i			
	Other (specify)		·			
	Supplied Air Pos. Press.	Y				

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[X] Hark (X) this box if you attach a continuation sheet.

).14		protective and safety equivalent to reduce or elimina this question and complete		
<u>BI</u>	Process type	REBOND CARPET PAD MA	NUFACTURER	
I_1				3
	AOLK BLeg			
			Wear or Use	
	<u>B</u>	quipment Types	<u>(Y/N)</u>	
	R	espirators	<u> </u>	
	s	afety goggles/glasses	<u> </u>	
	P	ace shields	N	
	c	overalls	<u>N</u>	
	В	ib aprons	<u> </u>	
	c	hemical-resistant gloves	N	:
		ther (specify)		
	0	(Her (Specify)		

[X] Mark (X) this box if you attach a continuation sheet.

(k.)

PART	D PERSONAL PROTECTIVE	AND SAPETY EQUIPMENT					
	Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.						
CBI							
[_]	Process type REBOND CARPET PAD MANUFACTURER						
	Work area	••••••	•••••	5			
	<u>E</u> g	uipment Types	Wear or Use (Y/N)				
	Re	spirators	N				
	Sa	fety goggles/glasses	<u> </u>				
	Fa	ce shields	N				
	Co	veralls	N				
	Bi	b aprons	N	1.1			
	Ch	emical-resistant gloves	N	ı			
	0ti	her (specify)					
	Supp	lied Air Pos. Press.	у				
			**************************************	•			

[_] Mark (X) this box if you attach a continuation sheet.

9.15	process respira tested,	ers use respirators when type, the work areas what tors used, the average want and the type and freque it separately for each	here the respira usage, whether or ency of the fit	tors are us r not the s	sed, the type respirators v	of ere fit
CBI		·			.•	
[_]	Process	type REI	BOND CARPET PAD	MANUFACTUE	RER	
	Vork Area	Respirator Type	Average Usage	Fit Tested (Y/N)	Type of Fit Test ²	Frequency of Fit Tests (per year)
	1	Breathing Air Pos. Pre	ess. A	<u>N</u>	NA	NA
	² Use the QL = Qu	er (specify) following codes to des: alitative antitative	ignate the type	of fit tes	t:	
	lark (Y)	this box if you attach	a continuation	heet		

	Describe all of the work eliminate worker exposure authorized workers, mark monitoring practices, proquestion and complete it	to the listed so areas with warning vide worker train	ubstance (e.g ng signs, ins ning programs	., restrict e gre vorker de , etc.). Pho	ntr <mark>ance only</mark> t tection and tocopy this
Provide workers with a training program, limit access to authorized personnel warning signs, monitoring of the area for the list substance.  Description of the area for the list substance.  Description of the list substance.  Process type of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Work area 1  Less Than Once Per Day Per Day Per Day Times Per Is Sweeping NA	Process type R	EBOND CARPET PAI	MANUFACTURE	R	
Warning signs, monitoring of the area for the list substance.  Indicate (X) how often you perform each housekeeping task used to clean up routing leaks or spills of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Work area 1  Less Than 1-2 Times 3-4 Times Hore Than Per Day Per Day Times Per is Sweeping NA	Work area	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	1	
Indicate (X) how often you perform each housekeeping task used to clean up routil leaks or spills of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Work area 1  Less Than 1-2 Times 3-4 Times Hore Than Per Day Per Day Times Per Is Sweeping NA	Provide workers with a t	raining program	, limit acces	s to authoriz	ed personnel,
leaks or spills of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Work area 1  Less Than 1-2 Times 3-4 Times Hore Than Once Per Day Per Day Per Day Times Per Is Sweeping NA	warning signs, monitorin	g of the area fo	or the list s	ubstance.	
leaks or spills of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Work area 1  Less Than 1-2 Times 3-4 Times Hore Than Once Per Day Per Day Per Day Times Per Is Sweeping NA					
leaks or spills of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Work area 1  Less Than 1-2 Times 3-4 Times Hore Than Once Per Day Per Day Per Day Times Per Is Sweeping NA	. *		,		
leaks or spills of the listed substance. Photocopy this question and complete is separately for each process type and work area.  Process type Rebond Carpet Pad  Vork area 1  Less Than 1-2 Times 3-4 Times Housekeeping Tasks Once Per Day Per Day Per Day Times Per Is Sweeping NA	<del> </del>		••		
Sweeping NA NA NA X  Vacuuming NA NA NA NA NA  Vater flushing of floors NA NA NA NA  Other (specify)	leaks or spills of the lis separately for each proces	sted substance. ss type and work	Photocopy thi	s question an	
Vater flushing of floors NA	leaks or spills of the lisseparately for each process  Process type R  Work area	eted substance.  es type and work  ebond Carpet Pac	Photocopy this area.	1 3-4 Times	More Than
Other (specify)	leaks or spills of the lisseparately for each process  Process type R  Work area	eted substance.  es type and work  ebond Carpet Pad  Less Than Once Per Day	Photocopy this area.  1-2 Times Per Day	1 3-4 Times Per Day	Hore Than
	leaks or spills of the lisseparately for each process  Process type R  Work area	Less Than Once Per Day	Photocopy this area.  1-2 Times Per Day  NA	1 3-4 Times Per Day NA	Hore Than Times Per D
NA NA NA NA	leaks or spills of the lisseparately for each process  Process type R  Work area	Less Than Once Per Day  NA	Photocopy this area.  1-2 Times Per Day  NA  NA	1 3-4 Times Per Day  NA  NA	Hore Than Times Per D  X
	leaks or spills of the lisseparately for each process  Process type R  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Vacuuming  Vater flushing of floors	Less Than Once Per Day  NA	Photocopy this area.  1-2 Times Per Day  NA  NA	1 3-4 Times Per Day  NA  NA	Hore Than Times Per D  X
	leaks or spills of the lisseparately for each process  Process type R  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Vacuuming  Vater flushing of floors	Less Than Once Per Day  NA  NA  NA	Photocopy this area.  1-2 Times Per Day  NA  NA  NA	1 3-4 Times Per Day  NA  NA  NA	Hore Than Times Per D  X  NA  NA
	leaks or spills of the lisseparately for each process  Process type R  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Vacuuming  Vater flushing of floors	Less Than Once Per Day  NA  NA  NA	Photocopy this area.  1-2 Times Per Day  NA  NA  NA	1 3-4 Times Per Day  NA  NA  NA	More Than Times Per D  X  NA  NA

**(**:

9 Describe all of the work eliminate worker exposur authorised workers, mark monitoring practices, pr question and complete it	w to the listed Areas with warm Ovide worker tre	substance (e.g ing signs, ins ining programs	j., restrict o Nyre vorker de	mtrance enly testion and
Process type	REBOND CARPET	PAD MANUFACTUR	RER	-
Work area	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	2	
Provide workers with a	training progra	m, limit acces	ss to authoriz	ed personnel
warning signs, monitori				pordonner
• •				
Indicate (X) how often yo leaks or spills of the liseparately for each process type	se type and work Rebond Carpet Pa	area.	s question an	d complete it
separately for each proces	Rebond Carpet Pa	d	2	d complete it
Process type	se type and work Rebond Carpet Pa	d 1-2 Times	s question an	More Then
Process type  Work area	Rebond Carpet Pa	rnotocopy thi	2 3-4 Times Per Day	More Then
Process type  Work area  Bousekeeping Tasks  Sveeping  Vacuuming	Rebond Carpet Pa	1-2 Times Per Day	2 3-4 Times Per Day	More Then
Process type  Work area  Bousekeeping Tasks  Sveeping	Less Then Once Per Day	1-2 Times Per Day	2 3-4 Times Per Day  NA	More Then Times For B
Process type  Work area  Bousekeeping Tasks  Sveeping  Vacuuming	Less Then Once Per Day  NA  NA	1-2 Times Per Day  NA  NA	2 3-4 Times Per Day  NA  NA	More Then Times For B
Frocess type	Less Then Once Per Day  NA  NA	1-2 Times Per Day  NA  NA	2 3-4 Times Per Day  NA  NA	More Then Times For B
Frocess type	Less Then Once Per Dey  NA  NA  NA	1-2 Times Per Day  NA  NA  NA	2 3-4 Times Per Day  NA  NA  NA	More Then Times For B

19 Describe all of the vort eliminate vorker exposus authorised workers, mark monitoring practices, pr question and complete it	covide worker tre	ing signs, in Information	r, restrict (	Mtrance ealy Staction and
Process type	REBOND CARPET P	AD MANUFACTUR	ER	
Work area				
Provide workers with a	training progra	m. limit acce	ee to outhori	
warning signs, monitor				zed personnel
		,		
O Indicate (X) how often yo leaks or spills of the li separately for each proce	sted substance. ss type and work	rnotocopy the	ask used to cl	lean up routin
leaks or spills of the li separately for each proce Process type Work area	Rebond Carp	et Pad	3-4 Times	Here Then
leaks or spills of the liseparately for each process type  Work area	Rebond Carp  Less Then Once Fer Day	Per Day	3 3-4 Times Per Day	Here Then
leaks or spills of the liseparately for each process type  Work area	Rebond Carp  Less Then Once Per Day	Per Day  NA	3-4 Times Per Day  NA	Nore Then
leaks or spills of the liseparately for each process type  Work area  Bousekeeping Tasks Sveeping Vacuuming	Rebond Carp  Less Then Once Per Day  NA  NA	Per Day  NA  NA	3 3-4 Times Per Day  NA  NA	Nore Then Times For D
leaks or spills of the liseparately for each process type  Work area	Rebond Carp  Less Then Once Per Day	Per Day  NA	3-4 Times Per Day  NA	Nore Then
leaks or spills of the liseparately for each process type  Work area  Bousekeeping Tasks Sweeping Vacuuming Vacuuming Vacuuming	Rebond Carp  Less Then Once Per Day  NA  NA	Per Day  NA  NA	3 3-4 Times Per Day  NA  NA	Nore Then Times For D
leaks or spills of the liseparately for each process type  Frocess type  Work area  Sousekeeping Tasks  Sveeping  Vacuuming  Vacuuming  Vater flushing of floors	Rebond Carp  Less Then Once Per Day  NA  NA  NA	Per Day  NA  NA  NA	3-4 Times Per Day  NA  NA  NA	More Then Times For Dr.  NA  NA

19 Describe all of the work eliminate worker exposure authorised workers, mark monitoring practices, pro question and complete it	to the listed s areas with warni ovide worker trai	ubstance (e.g ng signs, ins ning programs	., restrict e ure vorker de , etc.). Pho	ntrance only t tection and tocopy this
Process type	REBOND CARPET PA	AD MANUFACTUR	ER	2.24
Work area	•••••	• • • • • • • • • • • • • • • • • • • •	4	
Provide workers with a	training progra	m, limit acce	ss to authori	zed personnel,
warning signs, monitori	ing of the area i	for the list	substance.	
-		,		
leaks or spills of the lisseparately for each process  Process type R	sted substance. ss type and work debond Carpet Pac	Photocopy this area.	is question an	lean up routine id complete it
leaks or spills of the lisseparately for each process  Process type R  Work area	sted substance. ss type and work  Rebond Carpet Pac  Less Than	Photocopy this area.	4 3-4 Times	Hore Then
leaks or spills of the lisseparately for each process  Process type R  Work area	Less Than Once Per Day	Photocopy this area.  1-2 Times Per Day	4 3-4 Times Per Day	Hore Then 4
leaks or spills of the lisseparately for each process  Process type R  Work area	Less Than Once Per Day	1-2 Times Per Day NA	4  3-4 Times Per Day  NA	Hore Then 4
leaks or spills of the lisseparately for each process  Process type R  Work area	Less Than Once Per Day  NA	Photocopy this area.  1-2 Times Per Day  NA  NA	3-4 Times Per Day  NA  NA	Nore Them 4 Times Per De
leaks or spills of the lisseparately for each process  Process type R  Work area	Less Than Once Per Day	1-2 Times Per Day NA	4  3-4 Times Per Day  NA	Hore Then 4
leaks or spills of the lisseparately for each process  Process type	Less Than Once Per Day  NA	Photocopy this area.  1-2 Times Per Day  NA  NA	3-4 Times Per Day  NA  NA	Nore Then A Times Per De
leaks or spills of the lisseparately for each process  Process type	Less Than Once Per Day  NA  NA  NA	Photocopy this area.  1-2 Times Per Day  NA  NA  NA	3-4 Times Per Day  NA  NA  NA	Hore Then 4 Times Per De  X  NA  NA
leaks or spills of the lisseparately for each process  Process type R  Work area  Bousekeeping Tasks  Sweeping  Vacuuming  Vacuuming  Vater flushing of floors	Less Than Once Per Day  NA  NA  NA	Photocopy this area.  1-2 Times Per Day  NA  NA  NA	3-4 Times Per Day  NA  NA  NA	Nore Then Times Per

(3

19 Describe all of the work eliminate worker exposur authorised workers, mark monitoring practices, pr question and complete it	e to the listed a areas with varmi ovide vorker trai	rubstance (e.g ing signs, ins ining programs	, restrict e ure vorker de . etc.). Phe	ntrance enly ( )tection and )tecomy this
Process type	REBOND CARPET PA	D MANUFACTURE	ir.	
Work area	·	••••••	• • •	5
Provide workers with a	training progra	m, limit acce	ss to authori	zed personnel.
warning signs, monitor	ing of the area	for the list	substance.	
·/				
O Indicate (X) how often yo leaks or spills of the li separately for each process type	sted substance.  ss type and work  Rebond Carpet Pac	Photocopy this area.	ask used to clis question as	leen up routing d complete it
leaks or spills of the liseparately for each process type  Work area	sted substance.  ss type and work  Rebond Carpet Pac	Photocopy this area.	la question as	5
leaks or spills of the liseparately for each process type  Work area	sted substance.  Rebond Carpet Pac  Less Than  Once Per Day	Photocopy this area.	3-4 Times Per Day	S Here Than 4
leaks or spills of the liseparately for each process type  Work area	sted substance.  ss type and work  Rebond Carpet Pac	1-2 Times Per Day NA	3-4 Times Per Day	S  Nore Than 4  Times For De
leaks or spills of the liseparately for each process type  Frocess type  Work area  Bousekeeping Tasks  Sveeping	Less Than Once Per Day  NA  NA	1-2 Times Per Day  NA  NA	3-4 Times For Day  NA  NA	Some Than 4 Times For Be  X NA
leaks or spills of the liseparately for each process type  Frocess type  Work area  Bousekeeping Tasks  Sweeping  Vacuuming	Less Than Once Per Day	1-2 Times Per Day NA	3-4 Times Per Day	S  Nore Than 4 Times For Be
leaks or spills of the liseparately for each process type  Frocess type  Work area  Bousekeeping Tasks  Sweeping  Vacuuming  Vacuuming  Vater flushing of floors	Less Than Once Per Day  NA  NA	1-2 Times Per Day  NA  NA	3-4 Times For Day  NA  NA	More Then 4 Times For De  X  NA
leaks or spills of the liseparately for each process type  Work area  Bousekeeping Tasks Sweeping Vacuuming Vacuuming Vater flushing of floors	Less Than Once Per Day  NA  NA  NA	1-2 Times Per Day  NA  NA  NA	3-4 Times Per Day  NA  NA  NA	More Than Times For Be  X  NA  NA
leaks or spills of the liseparately for each process type  Frocess type  Work area  Bousekeeping Tasks  Sweeping  Vacuuming  Vacuuming  Vater flushing of floors	Less Than Once Per Day  NA  NA  NA	1-2 Times Per Day  NA  NA  NA	3-4 Times Per Day  NA  NA  NA	More Than Times For De X

9.21	Do you have a written medical action plan for responding to routine or emergency exposure to the listed substance?							
	Routine exposure							
	Yes							
	No 2							
	Emergency exposure							
	Yes 1							
	No 2							
	If yes, where are copies of the plan maintained?							
	Routine exposure:							
	Emergency exposure:							
9.22	Do you have a written leak and spill cleanup plan that addresses the listed substance? Circle the appropriate response.							
	Yes(1)							
	No 2							
	If yes, where are copies of the plan maintained? Safety Director's Office							
	Has this plan been coordinated with state or local government response organizations? Circle the appropriate response.							
	Yes 1							
	No (2)							
9.23	Who is responsible for monitoring worker safety at your facility? Circle the appropriate response.							
	Plant safety specialist 1							
	Insurance carrier 2							
	OSHA consultant 3							
	Other (specify) 4							
[_]	Mark (X) this box if you attach a continuation sheet.							

#### SECTION 10 ENVIRONMENTAL RELEASE

#### General Instructions:

(;·

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and, thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RQ.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART	A GENERAL INFORMATION	, <b>, 1</b>
10.01	1 Where is your facility located? Circle all appropriate response	onses.
CBI		
[_]	Industrial area	(1)
	Urban area	2
	Residential area	, (3 )
	Agricultural area	4
	Rural area	5
	Adjacent to a park or a recreational area	6
	Within 1 mile of a navigable vaterway	(7)
	Within 1 mile of a school, university, hospital, or nursing h	nome facility 8
	Within 1 mile of a non-navigable waterway	, 9
	Other (specify)	10

10.02	Specify the exact location of your is located) in terms of latitude a (UTM) coordinates.	facility (from cen nd longitude or Uni	tral poi versal 1	int where Transver	se Herci	cess unit	
	Latitude	•••••	032	•	57	15	
			. 1				
	Longitude	• • • • • • • • • • • • • • • • • • • •	097	_•	22 -	56	
	UTM coordinates Zone	, North	ing	, Ba	sting_		
10.03	If you monitor meteorological cond the following information.	itions in the vicin	ity of y	our faci	lity, p	rovide	
	Average annual precipitation	••••••			inc	:hes/yea:	
	Predominant wind direction						
<del></del>							
10.04	Indicate the depth to groundwater I	below your facility	•				
	Depth to groundwater	•			met	ers	
	•	-		·	, 1		
10.05 CBI	Por each on-site activity listed, i listed substance to the environment Y, N, and NA.)	indicate (Y/N/NA) al	ll routin	ne relea	ses of defini	the ition of	
	On-Site Activity		ronment				
		Air		ter	;	Land	
	Hanufacturing	NA NA	— NA			NA	
	Importing	NA	NA		<u>N</u>	NA	
	Processing	<u> </u>	N			N	
	Othervise used	NA NA	NA		<u>N</u>	NA	
	Product or residual storage	<u> </u>	N			<u> </u>	
	Disposal	NA	NA		N	NA	
	Transport	NA	NA			VA.	
	lark (X) this box if you attach a con	ntinuation sheet.	····				
						<del></del>	

10.06	Provide the following information for the lister of precision for each item. (Refer to the instrant example.)		
CBI	•		
	Quantity discharged to the air	17.43	kg/yr ± UK X
	Quantity discharged in wastewaters	None	kg/yr ±None X
	Quantity managed as other waste in on-site treatment, storage, or disposal units	NA	kg/yr ± <u>NA</u> X
	Quantity managed as other waste in off-site treatment, storage, or disposal units	NA	kg/yr + NA %

[ ] Mark (X) this box if you attach a continuation sheet.

process block or res	eam containing the listed substance as idual treatment block flow diagram(s). rately for each process type.	Photocopy this questi
Process type	REBOND CARPET PAD MANUFACTURING,	
Stream ID Code	Control Technology	Percent Efficier
7.3	Desicant Filter	UK
		1
		<b>A</b> +

(?)

substance in terms of residual treatment to source. Do not incl	ons Identify each emission point source containing the listed of a Stream ID Code as identified in your process block or clock flow diagram(s), and provide a description of each point ude raw material and product storage vents, or fugitive emission ment leaks). Photocopy this question and complete it separately be.
	REBOND CARPET PAD MANUFACTURER
Point Source ID Code	Description of Emission Point Source
	Steam vent fan
7 Q	Vent fan for reaction zone
	: ·
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this

²Prequency of emission at any level of emission

³Duration of emission at any level of emission

Average Buission Factor — Provide estimated ( $\pm$  25 percent) emission factor (kg of emission per kg of production of listed substance)

Point Source ID Code	Stack Height(m)		Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)	Building Vidth(m)	Vent Type
7 P	9.15	.7625	Ambient	<u>UK</u>	7.62	94.55	V
7 Q	9.15	.7625	Ambient	UK	7.62	94.55	V
		·					
	Source ID Code	Source ID Stack Code Height(m)  7 P 9.15	Point Source         Inner Diameter (at outlet)           ID Code         Height(m)         (a)           7 P         9.15         .7625	Point Source Diameter Exhaust  ID Stack (at outlet) Temperature  Code Height(m) (m) (*C)  7 P 9.15 .7625 Ambient	Point Source Diameter Exhaust Exit  ID Stack (at outlet) Temperature Velocity Code Height(m) (m) (°C) (m/sec)  7 P 9.15 .7625 Ambient UK	Point Source Diameter Exhaust Exit  ID Stack (at outlet) Temperature Velocity (m/sec)  Point Source Diameter Exhaust Exit  Temperature Velocity (m/sec)  Point Substitution (at outlet) Temperature Velocity (m/sec)  Po	Point Source Diameter Exhaust Exist  ID Stack (at outlet) Temperature Velocity (m/sec) Height(m) (m) (°C) (m/sec) Height(m) Vidth(m)  7 P 9.15 .7625 Ambient UK 7.62 94.55

H = Morisontal
V = Vertical

	Mark	(X)	this	box	if	you	attach	8	${\tt continuation}$	sheet.
--	------	-----	------	-----	----	-----	--------	---	----------------------	--------

²Width of attached or adjacent building

³Use the following codes to designate vent type:

CBI	distribution for each Point Source	in particulate form, indicate the particle size ID Code identified in question 10.09. e it separately for each emission point source.
<u>[</u> ]	Point source ID code	
	Size Range (microns)	Mass Fraction (% ± % precision)
	< 1	NA
	≥ 1 to < 10	NA
	≥ 10 to < 30	NA
	≥ 30 to < 50	NA NA
	≥ 50 to < 100	NA NA
	≥ 100 to < 500	NA
	≥ 500	NA NA
	•	Total = 100%

[ ] Mark (X) this box if you attach a continuation sheet.

#### PART C PUGITIVE EMISSIONS

Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

Number of Components in Service by Weight Percent of Listed Substance in Process Stream Less Greater Equipment Type than 5% 5-10% 11-25% 26-75**X** 76-99% than 99% Pump seals1 Packed NA NA NA NA NA NΑ Mechanical NA NA NA NA NA Double mechanical² NA NA NA NA NA Compressor seals1 NA NA NA NA NA NA **Flanges** NA NA NA NA NA NA Valves Gas³ NA NA NA NA NA NA Liquid NA NA NA NA NA Pressure relief devices NA NA -NA NA NA NA (Gas or vapor only) Sample connections Gas NA NA NA NA NA NA Liquid NA NA NA NA NA NA Open-ended lines (e.g., purge, vent) Gas NA NA NA NA NA NA NA Liquid NA NA NA NA

## 10.13 continued on next page

[ ] Mark (X) this box if you attach a continuation sheet.

¹List the number of pump and compressor seals, rather than the number of pumps or compressors

### 10.13 (continued)

- ²If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) that will detect failure of the seal system, the barrier fluid system, or both, indicate with a "B" and/or an "S", respectively
- ³Conditions existing in the valve during normal operation
- ⁴Report all pressure relief devices in service, including those equipped with control devices
- Lines closed during normal operation that would be used during maintenance operations

Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

Number of Pressure Relief Devices	b. Percent Chemical in Vessel	c.  Control Device	d. Estimated <u>Control Efficie</u> ncy ²
NA	NA	NA	NA
NA	NA NA	NA	NA NA
NA	NA	NA	· NA
NA	NA NA	NA	NA
NA	NA	NA	NA
NA	NA	NA	NA \
NA NA	NA	NA	NA
NA	NA	NA	NA
NA NA	NA	NA	NA

Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

	Mark	(X)	this	box	if	you	attach		continuation	sheet.
--	------	-----	------	-----	----	-----	--------	--	--------------	--------

²The BPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The BPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

[_]	Process type	•••••••	• • • • • • • • • •	REBOND CA	RPET PAD MAN	IUFACTURER
	Equipment Type	Leak Detection Concentration (ppm or mg/m³) Heasured at Inches from Source	Detection Device	Frequency of Leak Detection		Repairs Completed
	Pump seals					2012(12(60)
	Packed	NA	NA	NA	NA	MA
	Mechanical	NA NA	NA	NA NA	NA NA	NA NA
	Double mechanical	NA	NA NA	NA NA	<del></del>	<u>NA</u>
	Compressor seals	NA NA	NA NA	NA NA	NA NA	NA
	Flanges	NA	NA	NA NA		NA
	Valves			NA	NA	NA
	Gas	NA NA	NA	NA	NA	. 374
	Liquid	NA NA	NA NA	NA NA		NA NA
	Pressure relief devices (gas or vapor only)	NA	NA NA		NA I	NA
	Sample connections			NA .	<u>NA</u>	NA
	Gas	NA	NA	37.4	37.4	
	Liquid	NA NA	NA NA	NA NA	NA	<u>NA</u>
(	Open-ended lines		NA	NA	NA .	<u> </u>
	Gas	NA	NA	NA.	NT.A	•••
	Liquid	NA		NA NA	NA	NA NA
	Use the following cod POVA = Portable organ PPH = Fixed point mon 0 = Other (specify)	es to designate de ic vapor analyzer	tection dev	ice:		

### PART & NON-ROUTINE RELEASES

10.23 Indicate the date and time when the release occurred and when the release ceased or was stopped. If there were more than six releases, attach a continuation sheet and list all releases.

Release	Date Started	Time (am/pm)	Date Stopped	Time (am/pm)
1	NA	<u>NA</u>	<u>NA</u>	NA.
2	NA	NA NA	NA NA	NA
3	NA	NA	NA NA	<u>NA</u>
4	NA	NA	NA	NA
	NA	NA	NA	NA
6	NA_	NA	NA	<u>NA</u>

10.24 Specify the weather conditions at the time of each release.

Release	Vind Speed (km/hr)	Wind Direction	Humidity (%)	Temperature (°C)	Precipitation (Y/N)
			l		
	<del></del>				
3					
			,		
	<del></del>				
6					

[ ] Mark (X) this box if you attach a continuation sheet.

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 92098

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PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

Effective Date: 12/13/88 Date Printed: 05/03/89

MSDS:000609

## 3. FIRE AND EXPLOSION HAZARD DATA: (CONTINUED)

Do not reseal contaminated containers since pressure build-up may cause rupture. Fire point: 146C (295F).

FIRE-FIGHTING EQUIPMENT: People who are fighting isocyanate fires must be protected against nitrogen oxide fumes and isocyanate vapors by wearing positive pressure self-contained breathing apparatus and full protective clothing.

#### 4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Stable when stored under recommended storage conditions. Store in a dry place at temperatures between 18-41C (65-105F).

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Water, acid, base, alcohols, metal compounds, surface active materials. Avoid water as it reacts to form heat, CO2 and insoluble urea. The combined effect of the CO2 and heat can produce enough pressure to rupture a closed container.

HAZARDOUS DECOMPOSITION PRODUCTS: Isocyanate vapor and mist, carbon dioxide, carbon monoxide, nitrogen oxides and traces of hydrogen cyanide.

HAZARDOUS POLYMERIZATION: May occur with incompatible reactants, especially strong bases, water or temperatures over 410 (105F).

## 5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS:

Evacuate and ventilate spill area, dike spill to prevent entry into water system, wear full protective equipment including respiratory equipment during clean up.

Major spill: Call Dow Chemical U.S.A. (409) 238-2112. If

(Continued on Page 3)
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PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

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## 5. ENVIRONMENTAL AND DISPOSAL INFORMATION: (CONTINUED)

transportation spill involved call CHEMTREC (800) 424-9300. If temporary control of isocyanate vapor is required a blanket of protein foam (available at most fire departments) may be placed over the spill. Large quantities may be pumped into closed but not sealed containers for disposal.

Minor spill: Absorb the isocyanate with sawdust or other absorbent and shovel into open top containers. Do not make pressure tight. Transport to a well-ventilated area (outside) and treat with neutralizing solution consisting of a mixture of water and 3-8% concentrated ammonium hydroxide or 5-10% sodium carbonate. Add about 10 parts of neutralizer per part of isocyanate with mixing. Allow to stand for 48 hours letting evolved carbon dioxide to escape.

Clean-up: Decontaminate floor using water/ammonia solution with 1-2% added detergent letting stand over affected area for at least 10 minutes. Cover mops and brooms used for this with plastic and dispose properly (often by incineration).

DISPOSAL METHOD: Follow all federal, state and local regulations. Liquids are usually incinerated in a proper facility. Solids are usually also incinerated or landfilled. Empty drums should be filled with water. Let drum stand unsealed for 48 hours. Before disposal drums should be drained, triple rinsed, and holed to prevent reuse. Dispose of drain and rinse fluid according to federal, state and local laws and regulations. The most commonly accepted method is in an approved wastewater

treatment facility. Drums should be disposed of in accordance with federal, state and local laws and regulations. Commonly accepted methods for disposal of plastic drums are disposal in an approved landfill after shredding or incineration in an approved industrial incinerator or other appropriate incinerator facility. Steel drums are commonly disposed in an approved landfill after crushing or in accordance with other approved procedures.

(Continued on Page 4)
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PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

Effective Date: 12/13/88 Date Printed: 05/03/89 MSDS:000609

#### 6. HEALTH HAZARD DATA:

EYE: May cause pain, severe eye irritation and moderate corneal injury. Vapors may irritate eyes.

SKIN CONTACT: Prolonged or repeated exposure may cause severe irritation, even a burn. Skin contact may result in allergic reaction even though it is not expected to result in absorption of amounts sufficient to cause other adverse effects.

SKIN ABSORPTION: The LD50 for skin absorption in rabbits is >9400 mg/kg.

INGESTION: Single dose oral toxicity is low. The oral LD50 for rats is 5800 mg/kg. Ingestion may cause gastrointestinal irritation or ulceration.

INHALATION: Excessive vapor concentrations are attainable and could be hazardous on single exposure. Single and repeated excessive exposure may cause severe irritation to upper respiratory tract and lungs (choking sensation, chest tightness), respiratory sensitization, decreased ventilatory capacity, liver effects, cholinesterase depression, gastrointestinal distress and/or neurologic disorders. The 4-hour LC50 for TDI for rats is 13.9 ppm.

SYSTEMIC & OTHER EFFECTS: Based on available data, repeated exposures are not anticipated to cause any additional significant adverse effects. For hazard communication purposes under OSHA standard 29 CFR Part 1910.1200, this chemical is listed as a potential carcinogen by Nat'l. Tox. Program and IARC. An oral study in which high doses of TDI were reported to cause cancer in animals has been found to contain numerous deficiencies which compromise the validity of the study. TDI did not cause cancer in laboratory animals exposed by inhalation, the most likely

route of exposure. Birth defects are unlikely. Exposures having no effect on the mother should have no effect on the fetus. Did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother. Results of in vitro ("test tube") mutagenicity

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PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

Effective Date: 12/13/88 Date Printed: 05/03/89 MSDS:000609

6. HEALTH HAZARD DATA: (CONTINUED)

tests have been inconclusive.

#### 7. FIRST AID:

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

INHALATION: Remove to fresh air. If not breathing, give mouthto-mouth resuscitation. If breathing is difficult, give oxygen. Call a physician.

NOTE TO PHYSICIAN: May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopic control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient. The manifestations of the respiratory symptoms, including pulmonary edema, resulting from acute exposure may be delayed. May cause respiratory sensitization. Cholinesterase inhibition has been noted in human exposure but is not of benefit in determining exposure and is not correlated with signs of exposure.

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PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

Effective Date: 12/13/88 Date Printed: 05/03/89 MSDS:000609

#### 8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE (S): OSHA PEL is 0.02 ppm as a ceiling limit for toluene 2,4-diisocyanate. ACG!H TLV is 0.005 ppm; 0.02 ppm STEL for toluene 2,4-diisocyanate. Dow Industrial Hygiene Guide is 0.02 ppm as a ceiling limit for toluene diisocyanate.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved supplied-air respirator. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Safety shower should be located in immediate work area.

EYE PROTECTION: Use chemical goggles. If vapor exposure causes eye irritation, use a full-face, supplied-air respirator. Eye wash fountain should be located in immediate work area.

#### 9. ADDITIONAL INFORMATION:

**REGULATORY REQUIREMENTS:** 

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 31i and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

(Continued on Page 7)
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PRODUCT NAME: VORANATE (R) T-80 TYPE II TOLUENE DIISOCYANATE

Effective Date: 12/13/88 Date Printed: 05/03/89 MSDS:000609

### 9. ADDITIONAL INFORMATION: (CONTINUED)

An immediate health hazard A delayed health hazard A reactive hazard

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Warning properties of this material (irritation of eyes, nose and throat) not adequate to prevent chronic overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposure to lower concentrations. Exposures to vapors of heated TDI can be extremely dangerous. (Have TDI neutralizer available for spills.)

MSDS STATUS: Revised Section 9

#### SARA 313 INFORMATION:

This product contains the following substances subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME		CONCENTRATION	
TOLUENE-2,6-DIISOCYANATE TOLUENE-2,4-DIISOCYANATE	000091-08-7 000584-84-9	20 80	*

⁽R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company
For Further Information.

^{*} An Operating Unit of The Dow Chemical Company



# TEXAS WATER COMMISSION

P.O.BOX 13087 CAPITOL STATION AUSTIN, TEXAS 78711-3087

Document Processing Center Office of Toxic Substances CAIR Reporting Office TS-790 U.S. EPA 401 M ST., SW Washington, DC 20460

TWC-0053



## MPI, INC.

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